

RANDIAS FROM CENTRAL AMERICA

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The preparation of the manuscript for the genus Randia for the Flora of Guatemala presented some special problems. The type species of Randia is R. aculeata L., a species assumed to have come from the Caribbean basin and credited by Standley in his account of the genus in North American Flora (32: 174. 1934) to the lowlands around and in this basin from Florida and Mexico south to northern South America. Since that time a great many specimens from the Pacific side of Mexico and Central America as well as collections from montane forests and cloud forests at elevations up to 2,000 meters have been determined as R. aculeata L.

Randias of the subgenus Randia are difficult to work with for more than half of the specimens that we have from Guatemala lack flowers and flowers seem to be essential in the differentiation of the species. My studies for this group of Randias seem to indicate that the lowland species from the Pacific and Atlantic slopes of southern Mexico and Central America are closely related, perhaps sibling species. The montane species, especially those of the montane forests or cloud forests, are part of the closely-knit subgenus Randia. There are several species in the high, often isolated, mountains between the Isthmus of Tehuantepec and the Honduras Depression that seem to be closely related one to another. When flowers are available on the collections there seem to be characters to separate them into species units. The collections are far too few from the high mountains of this old core area of the Central American region to really understand what is happening. The montane endemism seems to be high in Randia as has been observed here with many other genera of plants. The ecological niches which are often isolated mountains apparently have been separated for a great enough period of time for considerable speciation to have taken place.

The subgenus* Basanacantha presents some very special problems. The plants have larger flowers and occasionally very

*Randia subg. Basanacantha (Hook. f.) L. Wms. comb. nov.
Basanacantha Hooker f. in Benth. & Hook. Gen. Pl. 2: 82. 1873.
LECTOTYPE: Randia monantha Benth. Pl. Hartw. 84. 1841;
Basanacantha monantha Hook. f. ex Hensl. Biol. Cent.-Am. Bot.
2: 39. 1881. The type specimen from Guatemala.

large fruits. The flowers are probably always unisexual and the plants may be dioecious. Approximately half of the tropical North American *Randias* belong in this subgenus, as do five of the ten recognized species to appear in the Flora of Guatemala.

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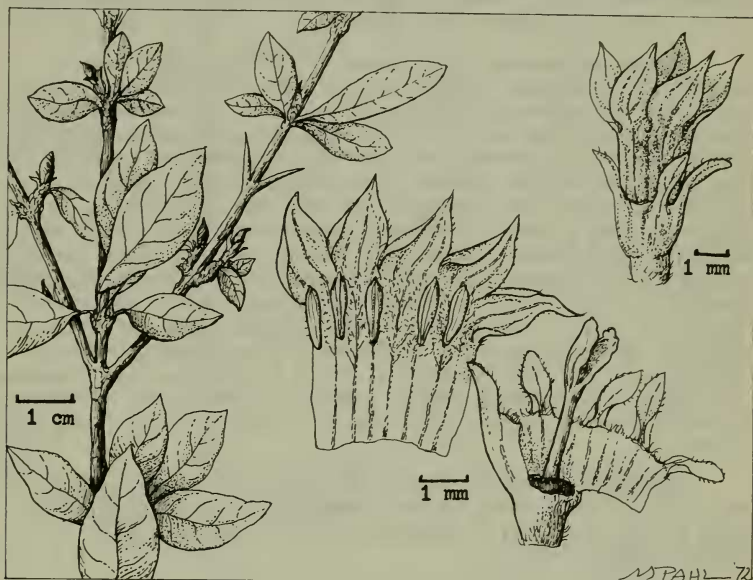
RANDIA MONTANA L. Wms. sp. nov.

Subg. *Randia*. Frutices monticolae usque ad 2 m. alti spinosi. Folia breviter petiolata submembranacea elliptica vel oblanceolato-elliptica acuta glabra; inflorescentia uniflora; calyx turbinatus 5-lobatus, lobi oblanceolati acuminati ciliati; corolla alba parva, tubus intus pubescens, lobi subaequales ovato-lanceolati acuminati; fructus desideratur.

Montane shrubs 1-2 m. tall, branchlets slender, glabrous, with scattered, paired, slender spines; the leaves a pair at each node, or usually borne on inconspicuous short-shoots and 2-4 on each short-shoot, with intrapetiolar stipules, the petioles 2-5 mm. long, slender, the blades submembranaceous, elliptic or oblanceolate-elliptic, acute, glabrous, (2-) 3-6 cm. long and 1-2 cm. broad, 8-10 pairs of lateral nerves inconspicuous; inflorescence a single flower terminal on the short-shoots; ovary glabrous, or hirsute at juncture of pedicel, about 15 mm. long; calyx turbinate, the calyx tube about 2 mm. long, the lobes 5, oblanceolate, acuminate, ciliate, about 2 mm. long and 0.5-0.7 mm. broad above the middle, slightly unequal; corolla hypercrateriform, about 7-8 mm. long, pubescent within in the throat and tube, the tube about 4 mm. long, the lobes a little shorter, the lobes unequally ovate-lanceolate, acuminate, about 3 mm. long; style about as long as the corolla tube, bifid; anthers inserted in throat of corolla, sessile, about 2.5 mm. long; fruits unknown.

Honduras: flowers white, shrub 1-2 m., common, cut-over cloud forest between Calaveras and El Duraznillo, on Cordillera Opalaca, Dept. Intibucá, alt. 1,800 m., March 12, 1970, Molina & Molina 25550 (type, F; EAP); "crucito," flowers white, shrub 1-2 m., common, mixed forest along Huise River, 9 km. east of La Esperanza, Dept. Intibucá, alt. 1,600 m., March 13, 1970, Molina & Molina 25570 (F; EAP).

A montane species allied to the group around *R. cookii* and *R. standleyana*. It is distinguished by the ob lanceolate acuminate calyx lobes which are about as long as the tube, by the thin, oblanceolate or elliptic leaves, and by the ovate-lanceolate acuminate corolla lobes.



Randia montana. Habit, a flower at anthesis, and dissections of a flower with appropriate scales. Drawn from the type by Marion Pahl, July 1972.

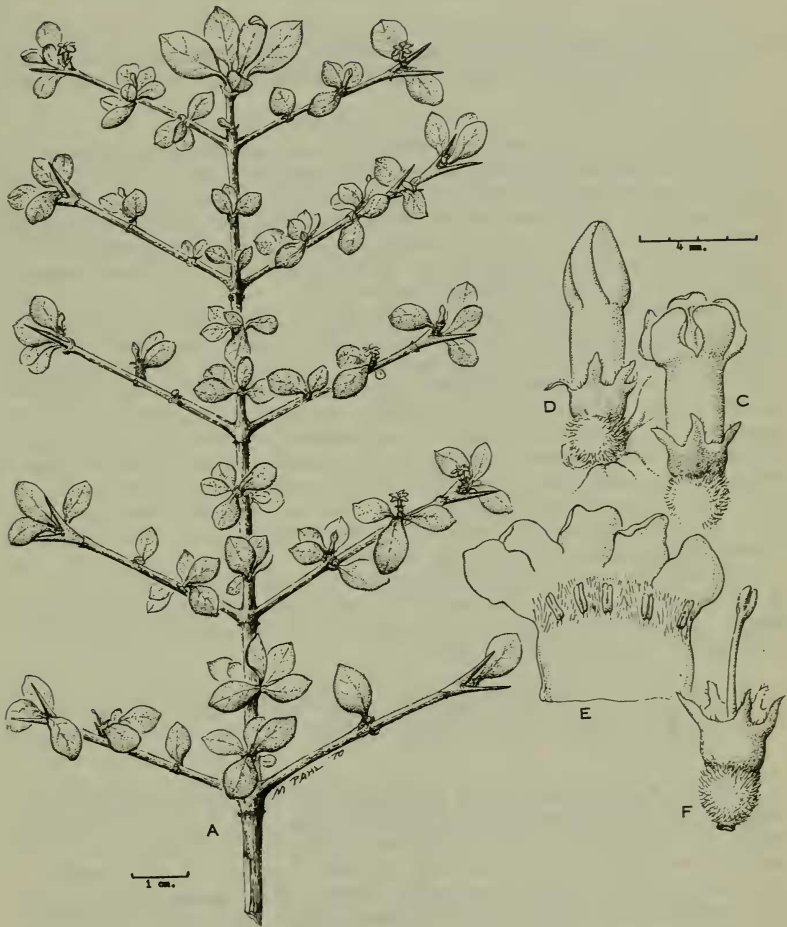
RANDIA STANDLEYANA L. Wms. sp. nov.

Subg. Randia. Frutices aut arbores. Folia sessilia obscure pubescentia, laminae obovatae aut late obovatae obtusae ad basem attenuatum; inflorescentia sessiles, fasciculi terminales uni-pauciflorae; flores perparvi; calyx campanulatus 5-lobatus lobi lanceolati acuti ciliati; corolla hypercrateriformis, tubus angustus, lobi ovati vel suborbiculares patentes; fructus desideratur.

Shrubs or perhaps small trees of unknown size; the branchlets opposite, mostly about 4-5 cm. long and terminated by a pair of spines 6-10 mm. long, sparsely pilose or glabrescent; the leaves usually 4 on very short opposite short-shoots, sessile or nearly so, obscurely puberulent on both surfaces, the blades obovate to broadly obovate, obtuse, attenuate to the base, mostly 7-15 mm. long and 3-10 mm. broad; inflorescence a sessile 1-few-flowered fascicle terminal on short-shoots; flowers very small, mostly 4-5 mm. long; ovary densely white pubescent; calyx campanulate, 5-lobate, glabrous, about 1-1.5 mm. long, the lobes lanceolate, acute, ciliate, to 0.8 mm. long; corolla salverform, 3-4 mm. long, 5-lobate, glabrous outside, sparsely pubescent in the throat, the tube 2-2.5 mm. long, lobes spreading, ovate or suborbicular, obtuse, 1.5-2 mm. long; stamens nearly sessile in the throat of corolla; style as long as the corolla tube, the stigma bifid; fruit not known.

Guatemala: Chimah, Petén, May 23, 1933, Lundell 3417; occupied clearing, La Libertad, Petén, May 29, 1933, Lundell 3474 (type, F; MICH); La Libertad, Petén, May 30, 1933, Lundell 3496.

These specimens and at least two other Central American Randias have been called R. malacocarpa to which this species is somewhat related. The most closely related of the Central American species is R. cookii, possibly a sibling species from the Pacific side of Chiapas and Guatemala. This is the smallest-flowered of the Randias known to me from Central America. It is named for Dr. Standley who was the specialist on Rubiaceae.



***Randia standleyana*.** A branch, a bud, a flower and dissections of a flower, with appropriate scales. Drawn from the type by Marion Pahl, 1971.